Montana Board of Oil and Gas Conservation Environmental Assessment

| Proposed Action –Approval of Drilling Permit for: |
|---|
| Operator: Black Butte Energy |
| Well Name/Number: Castle Rock #3 |
| Location: NW SE sec 24, T28N., R5W. |
| County: Pondera , MT; Field (or Wildcat) W/C |
| |
| Alta Occalities |
| Air Quality |
| (possible concerns) |
| Long drilling time <u>no – about one week</u> Unusually deep drilling (high |
| horsepower rig) <u>no –small single/double</u> Possible H2S gas production <u>trace in</u> <u>Madison</u> In/near Class I air quality area <u>No</u> |
| Air quality permit for flaring/venting (if productive) <u>probably not due to small</u> |
| volumes |
| <u>voidines</u> |
| Mitigation: |
| Air quality permit (AQB review) |
| x Gas plants/pipelines available for sour gas |
| Special equipment/procedures requirements |
| Other: |
| Comments: Madison oil test about 3000 feet Td |
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| Water Ovality |
| Water Quality (possible concerns) |
| Salt/oil based mud no |
| High water table no Surface drainage leads to live |
| water No, closest stream is Spring Creek 4/5 of a mile to the north. |
| water 140, diosest stream is opining order 470 or a time to the north. |
| Water well contamination no closest well about 1/10 mile away -201' deep -above |
| surface casing setting depth. 3 wells are about 1.2 mile south. |
| Porous/permeable soils Possible |
| Class I stream drainage No |
| Mitigation: |
| _ Lined reserve pit |
| xx Adequate surface casing |
| Berms/dykes, re-routed drainage |
| Closed mud system |
| Off-site disposal of solids/liquids (in approved facility) |
| Other: |
| Comments: Fresh water or sir/mist drilling fluid is customary in this area. |
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Soils/Vegetation/Land Use

| (possible concerns) |
|---|
| Steam crossings no |
| High erosion potential no <u>-Flat cultivated land</u> |
| Loss of soil productivity _no- will be reclaimed to cultivationUnusually large |
| wellsite no- 200x300' Damage to improvements no |
| Conflict with existing land use/values _temporary |
| Mitigation |
| Avoid improvements (topographic tolerance) |
| Exception location requested |
| x Stockpile topsoil |
| Stream Crossing Permit (other agency review) |
| x Reclaim unused part of wellsite if productive |
| Special construction methods to enhance reclamation |
| Other |
| Comments: private cultivated surface |
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| Health Hazards/Noise |
| (negoible concerns) |
| (possible concerns) |
| Proximity to public facilities/residences <u>about 0.8 miles south</u> Possibility of H2S |
| small quantities possible |
| Size of rig/length of drilling time |
| Mitigation: |
| _x Proper BOP equipment |
| Topographic sound barriers |
| H2S contingency and/or evacuation plan |
| Special equipment/procedures requirements |
| Other: |
| Comments: shallow Madison oil test no special concerns |
| |
| Wildlife/recreation |
| (possible concerns) |
| Proximity to sensitive wildlife areas (DFWP identified) n/aProximity to recreation |
| sites none Creation of new access to wildlife |
| habitat <u>no</u> Conflict with game range/refuge management <u>no</u> |
| Threatened or endangered Species <u>Listed endangered or threatened are the</u> |
| Piping Plover, Grizzly Bear, and Canada Lynx. Candidate species are Sprague's Pipit |
| and Whitebark Pine. MTFWP Natural Heritage Tracker website lists one (1) species of |
| concern: Ferruginous Hawk. 4 potential species of concern: Hayden's Shrew, Brook |
| Stickleback, Brassy Minnow, and Burbot |
| Mitigation: |
| Avoidance (topographic tolerance/exception) |
| Avoidance (topographic tolerance/exception) Other agency review (DFWP, federal agencies, DSL) |
| Screening/fencing of pits, drillsite |
| Other: |
| Oulet |

| Comments: <u>no concerns</u> |
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| Historical/Cultural/Paleontological |
| (possible concerns) Proximity to known sites none known |
| Mitigation |
| avoidance (topographic tolerance, location exception) other agency review (SHPO, DSL, federal agencies) |
| Other: Comments: No known sites, private property -surface owner controls |
| disposition of any cultural artifacts |
| |
| Social/Economic (possible concerns) Substantial effect on tax base Create demand for new governmental services Population increase or relocation Comments: no concerns |
| |
| |
| Remarks or Special Concerns for this site |
| 3000' Madison oil test, no special concerns |
| Summary: Evaluation of Impacts and Cumulative effects |
| Minor impacts dues to surface construction, no long term impacts unless production is established. Wellsite will be reclaimed if dry hole and reduced to operational area for producing well. |
| I conclude that the approval of the subject Notice of Intent to Drill (does/ <u>does not</u>) constitute a major action of state government significantly affecting the quality of the human environment, and (does/ <u>does not</u>) require the preparation of an environmental impact statement. |
| Prepared by (BOGC):John Gizicki(title:)Compliance Specialist |
| Date: April 11, 2014 |

| Other Persons Contacted: _MT Cadastral Website | |
|---|--|
| (Name and Agency) | |
| ownership, topo map and aerial photo (subject discussed) April 11, 2014 | |
| (date) | |
| If location was inspected before permit approval: Inspection date: | |
| Inspector: Others present during inspection: | |